## **CLAIMS**

1. Procedure for obtaining 11-(4-[2-(25 hydroxyethoxy)ethyl]-1-piperazinyl)dibenzo[b,f][1,4]thiazepine, of formula (I)

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(I)

or a pharmaceutically acceptable salt thereof, characterised in that it comprises reaction between a 15 compound of formula (II) and a compound of formula (III):

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in which X means a leaving group and P a protective group of alcohols resistant to alkaline conditions, in the presence of a base, followed by a step of deprotection

and, eventually, obtaining a pharmaceutically acceptable salt thereof.

- 2. Procedure according to Claim 1, characterised in that said reaction between said compound of formula (II) 5 and said compound of formula (III) is carried out by phase transfer in the presence of a phase-transfer catalyst.
- 3. Procedure according to Claim 2, characterised in that said phase-tranfer catalyst is selected from among tetrabutyl ammonium bisulphate, Aliquat 336, tetrabutyl 10 ammonium iodide, 18-corona-6 ether.
  - 4. Procedure according to Claim 2, characterised in that said phase-transfer reaction is carried out in the absence of organic solvent.
- 5. Procedure according to Claim 1, characterised 15 in that said base is an alkaline or alkaline-earth organic or inorganic base.
  - 6. Procedure according to Claim 5, characterised in that said base is an alkaline or alkaline-earth hydroxide or carbonate.
- 7. Procedure according to Claim 6, characterised in that said base is an alkaline hydroxide in solid form or in aqueous solution.
- 8. Procedure according to Claim 1, characterised in that X is halogen or an alkylsulphonyloxy or 25 arylsulphonyloxy group.
  - 9. Procedure according to Claim 8, characterised in that X is a mesylate, triflate, nonaflate, tresylate, tosylate, brosylate or nosylate.
- 10. Procedure according to Claim 1, characterised 30 in that said protective group of alcohols P is of ether type.
- 11. Procedure according to Claim 10, characterised in that said protective group of alcohols P of ether type is selected from tetrahydropyranyl, benzyl and trithyl 35 (triphenylmethylo).

- 12. Procedure according to Claim 11, characterised in that said protective group of alcohols P of ether type is trithyl.
- 13. Procedure according to Claim 1, characterised 5 in that said step of deprotection includes hydrolysis in acid medium of an intermediate of formula (IV):

(IV)

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in which P has the meaning defined in Claim 1.